

Tat responsive element

Rev responsive element

SA/SD prevents protein expression from basal promoter activity

Packaging signal

Primer binding site

Different 5' and 3' LTR with a unique restriction site at the 5' LTR

IRES sequence for translation of two proteins from a dicistronic mRNA

Two protective genes are active at different stages of viral replication

Episomal replication

SV40pA to block activity from the 3' LTR

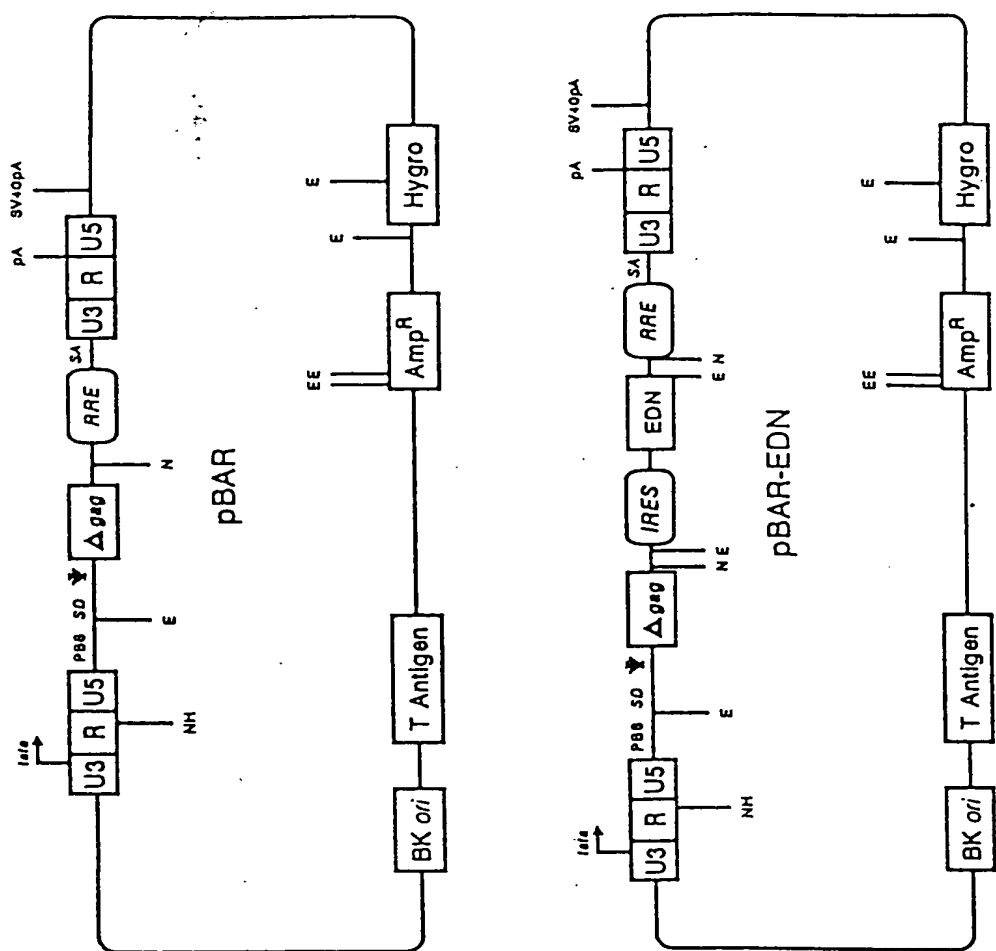
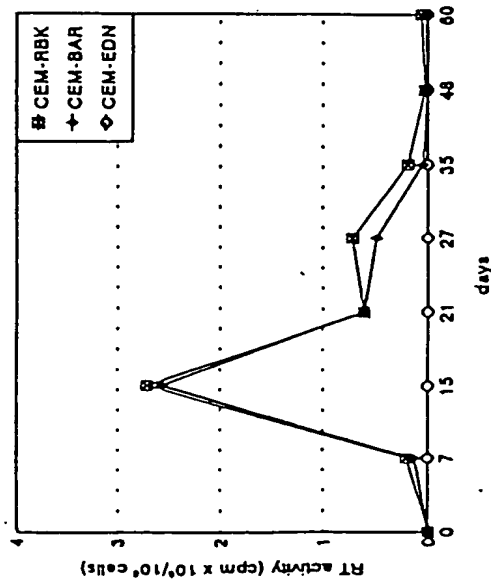
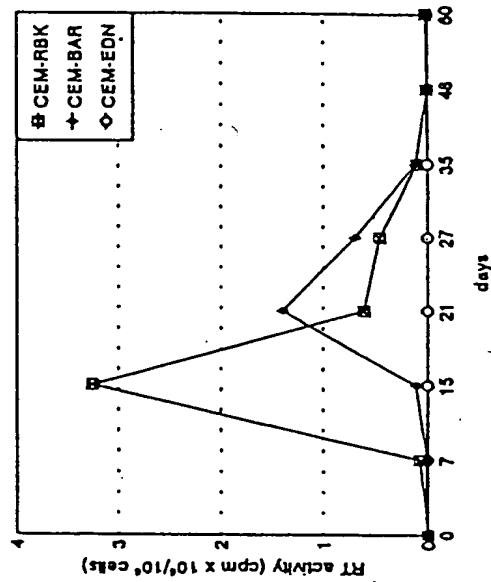


Figure 1

HIV-1_{IIIB} MOI 2



HIV-1_{IIIB} MOI 0.2



HIV-1_{IIIB} MOI 0.02

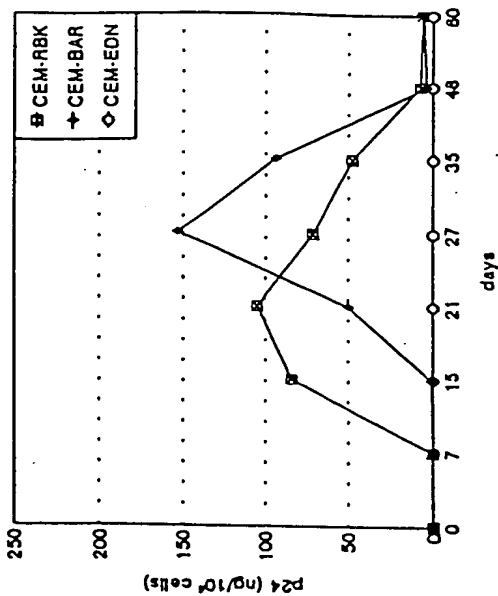
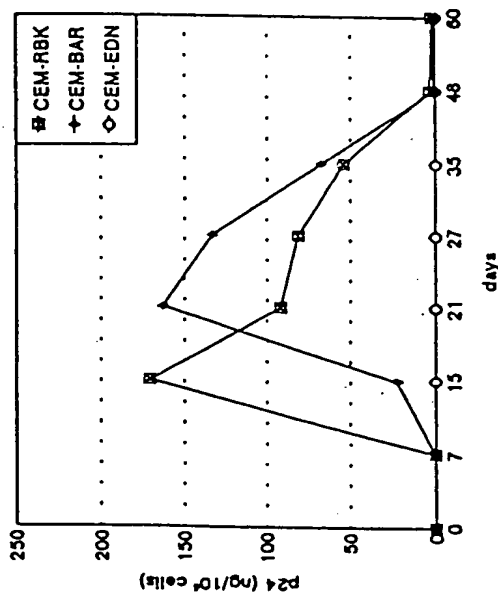
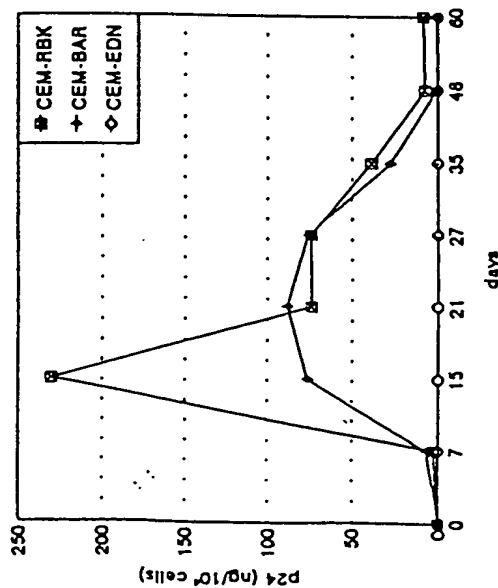
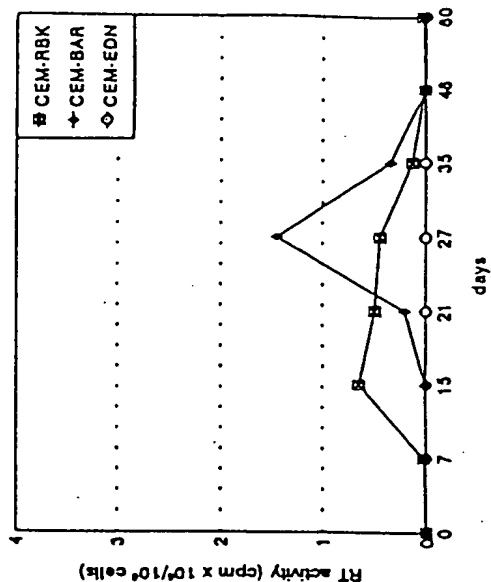
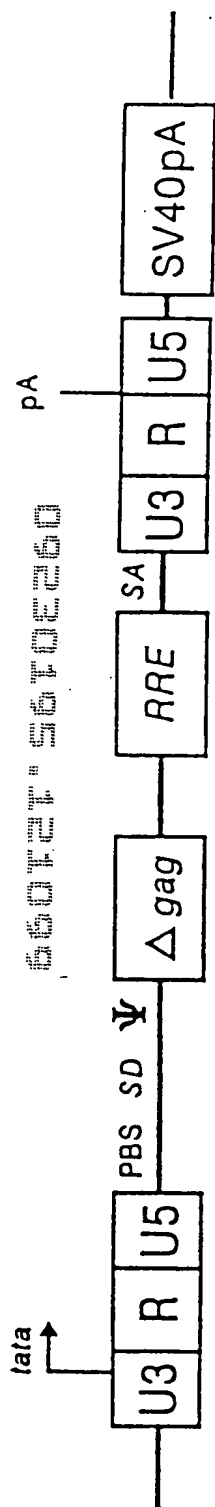
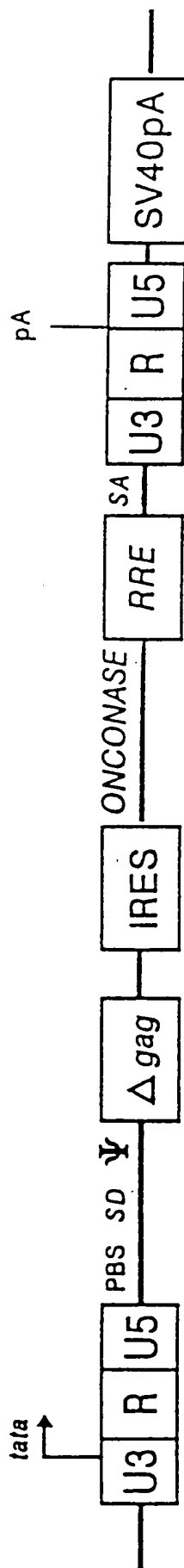


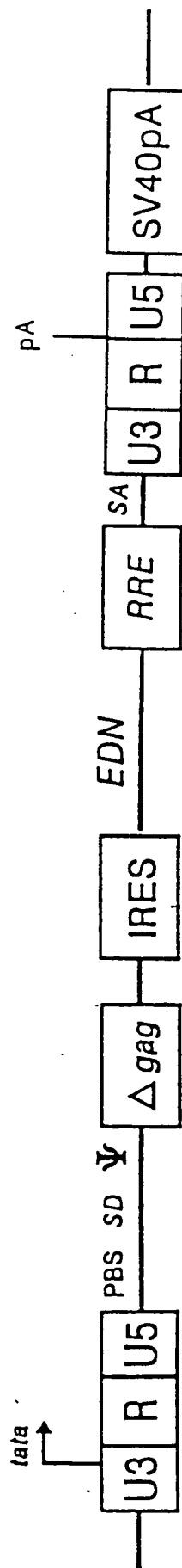
Figure 2



pBAR

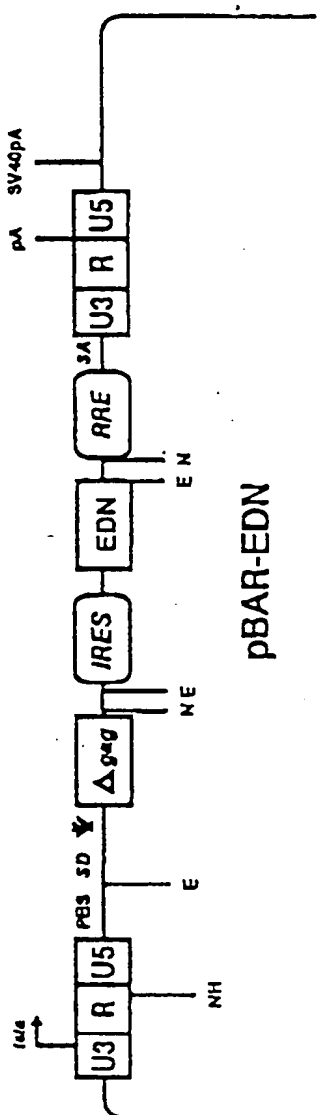


pBAR-ONC



pBAR-EDN

Figure 3



SEI

50	ATTTCCTCCCC	TCTCTCTCTCC	CCCCCCCCCTTAA	CGTTTACTCTCC	CGAAGCCCCCT
100	TGGCANTATAG	CCGGTGTGCG	TGTCTCTATAT	GTTATTCTTCC	ACCATATATCC
150	CGTCTTTTTCG	CAATGTGAGG	GGCCCGAAGC	CTCGCCCCCTGT	CTTCTCTGAGG
200	AGCATTCTCTA	GGGGTCTTTC	CCCTCTCTCC	AAGGANTATC	ANGGTCTGT
250	GAATGTGTG	AAGCAAGCAG	TTCCTCTCGA	YCTCTCTTGA	AGCAACAACA
300	CGTCTGTATC	GACCTCTTTC	AGCGACCGGA	ACCCCCCTAC	TGGCGACAGG
350	TGCTCTCTCG	YYCAAAAGCC	ACGTGTCTTAA	GATACACGTG	CAAGCCCCC
400	ACAAACCCAG	TGCCACGTG	TGAGTTGGAT	AGTTGTGCGA	AGAGTCAAT
450	CGCTCTCTC	AAGCGTATTC	ACACACCGGC	TGAAAGCATC	CCGAAAGCTA
500	CCCATTTGTA	TGGCATCTGA	TTTGGGCCCC	CCGTGCACAT	CGTTTACNTG
550	TGTTTATAGTC	AGGTTAAAAA	AGTCTTAGCC	CCCCCGTAC	ACCGGACCA
595	CGCTTTTCTCT	TTTCAAAAACA	CGATCATATAG	CTTTCCAC	

Intervening sequence

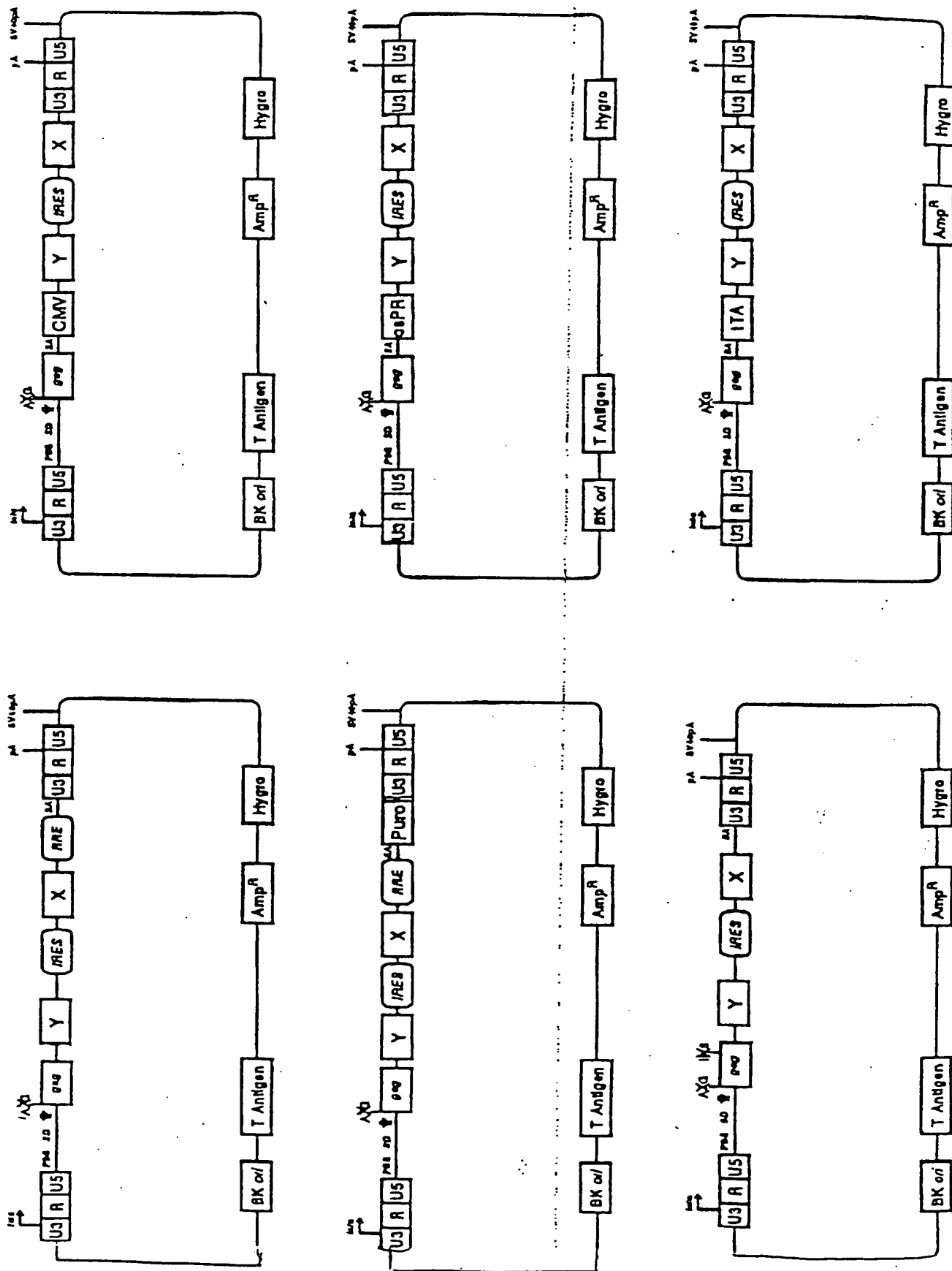
CTAGAAATAATTTTGTTAACTTTAAGAGGAGATATACATAIG

NOTE

AAA	COG	COG	CAG	TTC	ACT	TGG	GCT	CAG	TGG	TTC	GAA	ACT	CAG	CAT	ATC	AAC	ATG	ACT	TCT
CAG	CAG	TGC	ACT	ABC	GCT	ATG	CAG	GTT	ATC	AAC	AAC	TAC	CAG	CGT	OGT	TGC	AAA	AAC	CAG
AAC	ACT	TTC	CTG	ACT	ACT	TTC	GCT	AAC	AAC	GTT	GTT	AAC	TGC	GTT	TGC	OGT	AAC	AAC	ATG
ACT	TGC	COG	TCT	AAC	AAA	ACT	OGT	AAA	AAC	TGC	CAT	CAT	TCT	OGT	TCT	CAG	GTT	COG	CTG
ATC	CAT	TGC	APC	CTG	ACT	ACT	COG	TCT	COG	CAG	AAC	ATC	TCT	AAC	TGC	OGT	TAC	GCT	CAG
ACT	COG	GCT	AAC	ATG	TTC	TAC	ATC	GTT	GCT	TGC	GAC	AAC	OGT	GAC	CAG	CGT	OGT	GAC	COG
COG	CAG	TAC	COG	GTT	GTT	COG	GTT	CAT	CTG	GAC	OGT	ATC	ATC						

Figure 4

Figure 5



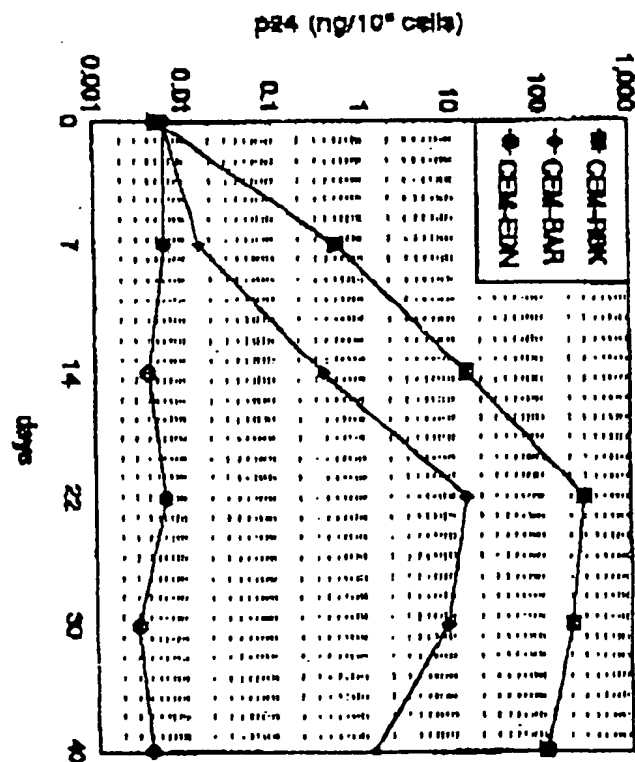
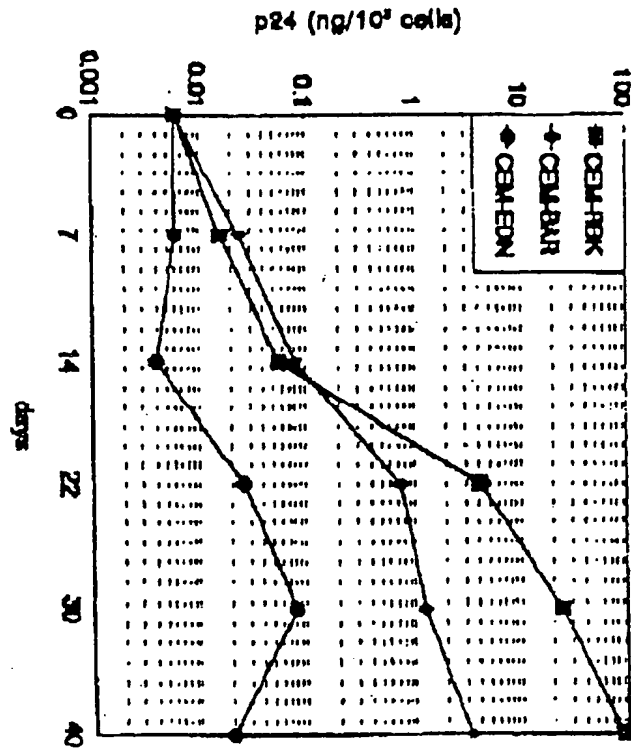


Figure 6

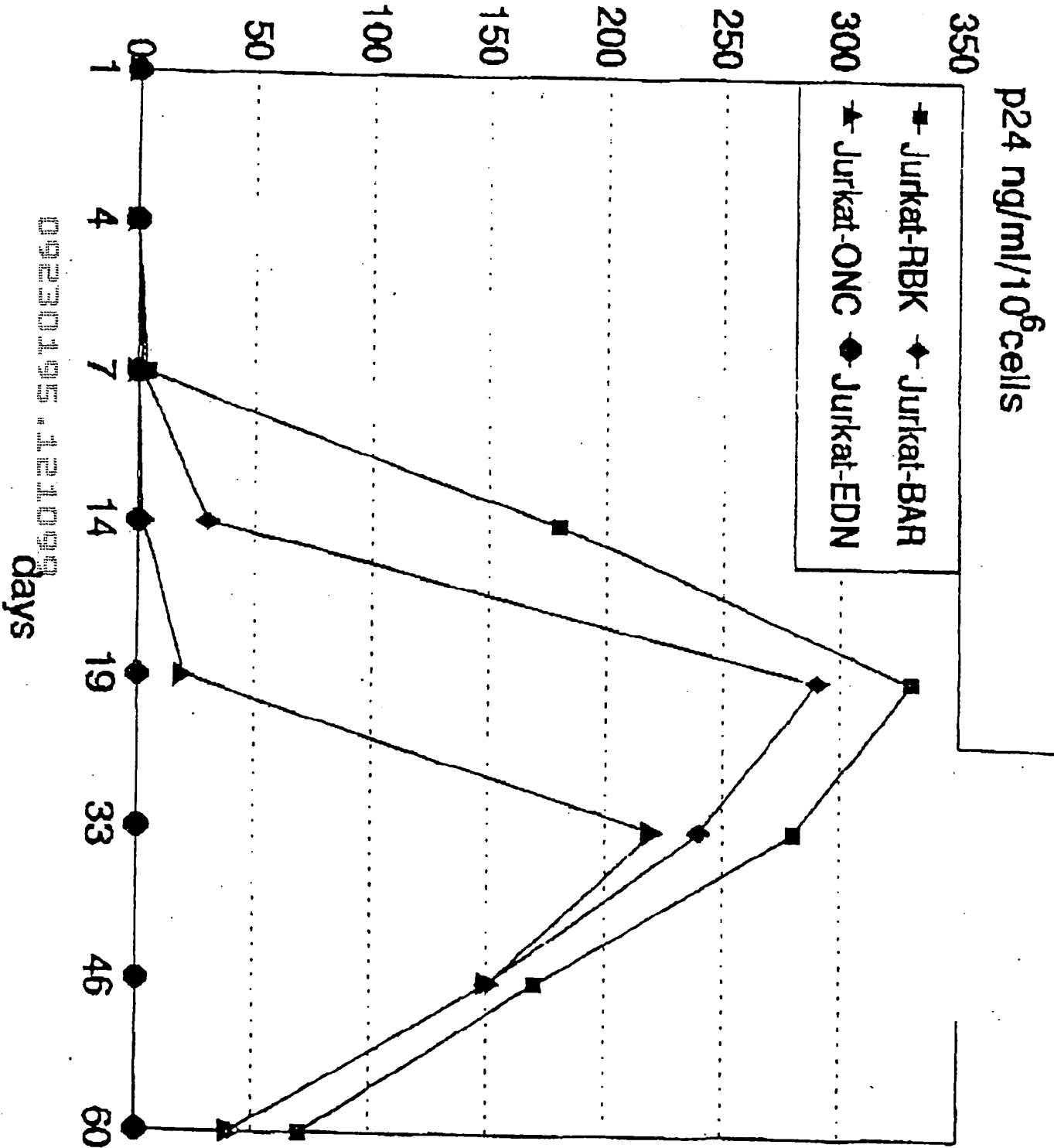


Figure 7